UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,071	01/12/2006	Andreas Gottschalk	STERN24.001APC	7547

20995 7590 02/28/2008

KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER	
FRANTZ, JESSICA L	
ART UNIT	**PAPER NUMBER**
3746	

NOTIFICATION DATE	DELIVERY MODE
02/28/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No.	Applicant(s)	
	10/530,071	GOTTSCHALK, ANDREAS	
	Examiner	Art Unit	
	JESSICA L. FRANTZ	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 December 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/11/2007, 3/31/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-9, 11-13, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Magnus 5,558,507. Magnus teaches the invention as claimed including a shaft (W) and a pumping apparatus 1 with a peristaltic drive device 27 for pumping a medium through a hose 4 having at least one compressible portion and a method of operating the same, the shaft being formed in one piece (when constructed), wherein the shaft is designed without a core shaft (no solid shaft upon which the cam segments are mounted as shown in figure 5) and essentially without a continuous core region (each there is a discontinuity between each cam segment see figure 5 and column 4, lines 43-57) or with a thin continuous core region (portion of the cams 7 that when stacked upon one another for a solid piece, as seen in figure 4, thin slice of cam to the right of each stub8 or recess 9) and having integral cam segments 7 (they are integral with one another upon construction of shaft) offset with respect to one another and contiguous to one another and with attached lamellae 2, the shaft being configured to guide movement of the lamellae in both forward and backward directions (since the lamellae are attached to the asymmetrically designed shaft, as the shaft turns from 0 degrees to180 degrees, the lamellae are guided in a forward direction, and as the shaft

turns from 180 degrees towards 360/0 degrees, the lamellae are guided in a backward direction) wherein an odd or even number of cam segments is provided and the shaft comprises a plastic (column 4, lines 64-66). Magnus also teaches a counter pressure plate 6 for applying the hose, and for supporting the pressure exerted on the hose by the lamellae wherein the counter pressure plate is sprung within the housing of the apparatus by one ore more springs (column 4, lines 22-27), and also generating a sinusoidal pinching movement of the lamellae as clearly shown in figure 1.

3. Magnus teaches the invention as claimed and as discussed above but fails to make an explicit mention that the ratio of the lamellae stroke to the lamellae height is 4:1 or the thin continuous region is 3 mm or less. It would have been obvious to one having ordinary skill in the art at the time the invention was made to reach such a ratio, since the claimed values are merely an optimum or workable range. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Magnus also suggests assembling the shaft structure in whatever structure is required for varying squeezing contours resulting in varying pumping rates and amounts (see column 4, lines 28-36). Also, Magnus fails to make explicit mention of that the cam segments are offset with respect to one another in such a way that only one cam segment is at a maximum distance from an imaginary line of the shaft and a uniform offset of the cam segments is provided. However, such a structure is a mere rearrangement of parts and it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70 and Magnus discusses

rearranging the cams and structuring the eccentric shaft in a manner corresponding to a desired squeezing contour for the purpose of achieving a desired pumping rate and volume (see column 4, lines 28-36). In likewise fashion, the desire to pinch the hose so that a volume can be enclosed in leak-tight manner at the first and last cam segment and the remaining lamellae serve for the reduction in volume or wherein the first and last lamellae are switched as a valve and the remaining lamellae are set in such a way that in any position, at least a narrow gap remains between the walls of the hose acted upon by the lamellae results only in a mere rearrangements of parts. It has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70 and such a rearrangement is suggested by Magnus for the purpose of adjusting the desired squeezing contour and therefore, the desired pumping rate and volume (see column 4, lines 28-36).

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Magnus 5,558,507 in view of Romanelli et al. 4,755,168. Magnus teaches the invention as claimed and as discussed above but fails to teach the following claimed limitation as taught by Romanelli: a pumping of fluid in two directions for the purpose of performing both drainage and irrigation (Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the structure of Magnus with a pumping of fluid in two directions for the purpose of performing both drainage and irrigation (Abstract).

Response to Arguments

5. See the above Action for a response to arguments.

6. Applicant argues that Magnus can not achieve the ratio as claimed, however, Examiner kindly disagrees. Magnus clearly discloses the ability to assemble the shaft according to the desired squeezing contour (column 4, lines 28-36). This ability allows the user to change the ratio as required by their particular needs.

7. Applicant further argues that the pump of Magnus would "not guide movement of the lamellae in both forward and backward directions." However, Examiner kindly disagrees as is addressed above.

8. Applicant also argues that the structure of Magnus does not disclose a one piece shaft with integral cams. However, Examiner contends that once the shaft is constructed, it is "one-piece" and furthermore, the term "integral" is sufficiently broad to embrace constructions united by such means as fastening and welding (in re Hotte (C.C.P.A.) 157 U.S.P.Q. 326); the term is not necessarily restricted to a one-piece article (in re Kohno (C.C.P.A.) 157 U.S.P.Q. 275); and may be construed as relatively broad (in re Dike (C.C.P.A.) 157 U.S.P.Q. 581).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA L. FRANTZ whose telephone number is (571)272-5822. The examiner can normally be reached on Monday through Friday 8:30a.m.-5:00p.m. E.S.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art Unit 3683

JF